REMARKS

Entry of this Amendment is proper because it does <u>not</u> raise any new issues requiring further search by the Examiner, narrows the issues on appeal, and is believed to place the present application in condition for immediate allowance.

Claims 1 and 3-36 are all the claims presently pending in the application.

Independent claim 1 is amended merely to incorporate the features of <u>original</u> claim 2, thereby defining more clearly the features of the invention. Thus, no additional search should be necessary, since the subject matter of claim 2 (i.e., claim 1 + 2) was examined on the merits in the present Office Action.

Claim 2 correspondingly is canceled without prejudice or disclaimer and claims 4 and 5 are amended to change their dependency from claim 2 to claim 1.

Independent claim 34 correspondingly is amended to include subject matter similar to claim 2.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and <u>not</u> for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicants specifically state that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-5, 18-22, and 34 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Egger et al. (U.S. Patent No. 6,233,571; hereinafter "Egger"). Claims 6-17, 23-33, 35, and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Egger in view of Anupam et al. (U.S. Patent No. 5,991,796; hereinafter "Anupam").

These rejections are respectfully traversed in the following discussion.

Serial No. 09/893,599   12
Docket No. YOR920010318US1
(YOR.294)

I.   THE CLAIMED INVENTION

The claimed invention is directed to a collaborative Web research method.

In an illustrative, non-limiting embodiment of the invention, as defined by independent claim 1, a collaborative Web research method includes <u>organizing a plurality of documents in a N-dimensional space</u> according to a collection of subject words, <u>based on the organizing, retrieving, by a user, the documents organized in the N-dimensional space</u> according to the collection of subject words, and <u>detecting that a researcher is retrieving documents which are considered related according to a distance function.</u>

In another exemplary embodiment of the invention, as defined by independent claim 6, a Web-based collaborative research method includes <u>determining coordinates for pages which are retrieved by a first user and mapping the coordinates into a space, and based on the coordinates of the pages, informing a second user of a closeness of a research by the first user.</u>

In another exemplary embodiment of the invention, as defined by independent claim 17, a method of collaborative network searching, includes <u>tracking a plurality of users' accessing of pages in a network and, based on a closeness of at least first and second users, notifying the first and second users of one another's accessing of the pages.</u>

In another exemplary embodiment of the invention, as defined by independent claim 18, a collaborative Web portal includes <u>a tracker</u> for tracking a user's bookmarks in accessing pages in a network, and for tracking preferences of the user, <u>a unit for determining a closeness in</u> research between users, and <u>a notifier for notifying, based on the closeness, at least one other user of the user's bookmarks, the at least one other user having a similar interest to that of the user based on a distance function.</u>

In another exemplary embodiment of the invention, as defined by independent claim 23,

a Web-based collaborative research system includes <u>a unit for determining coordinates for pages</u>

which are retrieved by a first user <u>and mapping the coordinates into a space, and a notifier for</u>

<u>informing, based on the coordinates of the pages, a second user of a closeness of a research by</u>

<u>the first user.</u>

Claims 34-36 recite somewhat similar embodiments of the invention, but are directed to,

for example, a signal-bearing medium tangibly embodying a program of machine-readable

instructions executable by a digital processing apparatus to perform a method of collaborative

Web research, a method of collaborative network searching, and a Web-based collaborative

research method.

In contrast with conventional navigation techniques, the spatial navigation technique

according to the claimed invention does <u>not</u> rely exclusively on the traversal of links in order to

retrieve documents from the World Wide Web, but instead, <u>detects that a researcher is retrieving</u>

<u>documents which are considered related according to a distance function.</u>

That is, th<u>e novel and unobvious distance function</u> according to the claimed invention

<u>allows movement from one page to another without traversing a link</u> (e.g., without opening up a

document by clicking with a browser or the like) (e.g., see specification at page 14, lines 10-15).

In the spatial navigation model according to the claimed invention, the data blocks (Web

pages, pictures and so forth) are indexed such that each data block resides in a specific point in a

N-dimensional coordinate system. The placement of the data blocks in this coordinate system is

performed such that data blocks which are relatively "close" to each other are related to the same

subjects (e.g., see specification at page 14, lines 15-20). Thus, the claimed invention provides,

Serial No. 09/893,599   14
Docket No. YOR920010318US1
(YOR.294)

among other things, a method for navigating the Web which does <u>not</u> require traversal of HTML

links (e.g., see specification at page 9, lines 21-22).

Moreover, the claimed invention provides a World Wide Web Portal which is capable of

correlating the usage habits of each human researcher and is <u>capable of notifying a researcher</u> of

a given topic that other researchers are currently working in related topics. This facility can be

used by researchers to find potential collaborators for a research task, and can be used in

knowledge management applications at research institutions (e.g., see specification at page 11,

lines 18-23).

With the claimed invention, researchers can engage in efficient collaborative research.

Further, the portal of the invention can correlate the usage habits of each human researcher and

can automatically (or otherwise) notify a researcher of a given topic that other researchers are

currently working in related topics (e.g., see specification at page 12, lines 1-5).

II.   THE PRIOR ART REJECTIONS

In the Response to Arguments, the Examiner states that Applicant's arguments have been

fully considered but they are not persuasive, and therefore, the rejections of claims 1-36 are

maintained.

A. .   Claims 1-5, 18-22, and 34 stand rejected under 35 U.S.C. § 102(e) as being

anticipated by Egger.

i.   **Claims 1-5 and 34:**

In the Response to Arguments, the Examiner states that *"[i]n response to applicant's*

arguments that the references fail to show certain features of applicant's invention, it is noted

that the features upon which Applicant relies (i.e., "without traversing a link") are not recited in

the rejected claims (sic) (1, 18, and 34)" (see Office Action at page 10, numbered paragraph 25;

emphasis added).

However, Applicant respectfully <u>disagrees</u> with the Examiner's position, and therefore,

traverses this rejection.

As mentioned above, independent claim 1 is amended to include all of the features of

claim 2.

In contrast with the method of Egger, the spatial navigation technique according to the

claimed invention does <u>not</u> rely on the traversal of links in order to retrieve documents from the

World Wide Web, but instead, <u>detects that a researcher is retrieving documents which are</u>

<u>considered related **according to a distance function**</u>, as claimed in independent claim 1.

That is, th<u>e novel and unobvious **distance function**</u> according to the claimed invention

<u>allows movement from one page to another</u> **without traversing a link** (e.g., without opening up

a document by clicking with a browser or the like) (e.g., see specification at page 14, lines 10-

15).

Particularly, independent claim 1 recites, *inter alia*:

> organizing a plurality of documents <u>in a N-dimensional</u>
> <u>space</u> according to a collection of subject words;
>
> based on said organizing, <u>retrieving, by a user, said</u>
> <u>documents organized in said N-dimensional space</u> according to
> said collection of subject words; and
>
> <u>detecting that a researcher is retrieving documents which</u>
> <u>are considered related **according to a distance function**</u> (emphasis
> added).

Serial No. 09/893,599   16
Docket No. YOR920010318US1
(YOR.294)

In other words, the collaborative Web research method according to the claimed

invention does not rely exclusively on the traversal of links in order to retrieve documents from

the World Wide Web. That is, the novel and unobvious **distance function** according to the

claimed invention allows movement from one page to another *without* traversing a link (e.g.,

without opening up a document by clicking with a browser or the like) (e.g., see specification at

page 14, lines 10-15).

In the Office Action, the Examiner alleges that Egger discloses a collaborative Web

research method (citing Egger at column 48, lines 20-45) including organizing a plurality of

documents (citing column 12, lines 40-45) in a N-dimensional space according to a collection of

subject words (citing column 5, lines 45-48), and based on the organizing (citing column 12,

lines 40-45), retrieving (citing column 5, lines 49-51), by a user (citing column 5, lines 55-58,

and column 6, lines 25-27), the documents organized (citing column 12, lines 40-45) in the N-

dimensional space (citing column 18, lines 32-40) according to the collection of subject words

(citing column 16, lines 4-12), as claimed.

However, contrary to the Examiner's position, Applicant respectfully submits that Egger

clearly does not disclose or suggest the claimed invention, as defined, for example, by

independent claim 1.

Indeed, Egger specifically discloses using Hyperlinks and "Web Crawling" (e.g., see

Egger at column 49, lines 12-22; see also column 49, lines 46-47) which the present invention

improves upon, and indeed, which clearly are different than the claimed invention (e.g., see

specification at page 4, lines 17-22, and page 5, lines 13-21).

Serial No. 09/893,599   17
Docket No. YOR920010318US1
(YOR.294)

For example, Egger <u>specifically</u> states that:

> The system accesses ling data 3004 or "<u>crawls</u>" the source
> web page (or source node 2008) looking for URLs which <u>directly</u>
> <u>link</u> the source web page to other web pages. <u>Web crawling</u> is a
> known technique in the art, performed by most World Wide Web
> search services, such as Yahoo (located at www.yahoo.com) or
> Alta Vista. <u>Crawling</u> is accomplished by the use of automated
> programs called robots or spiders, which analyze the web page for
> objects which provide URL links to other web pages or documents.

(see Egger at column 49, lines 12-22; emphasis added).

On the other hand, contrary to Egger, and as mentioned above, the novel and unobvious

collaborative Web research method according to the claimed invention does <u>not</u> rely exclusively

<u>on the traversal of links</u> in order to retrieve documents from the World Wide Web.

That is, the novel and unobvious **distance function** according to the claimed invention

allows movement from one page to another <u>without traversing a link</u> (e.g., without opening up a

document by clicking with a browser or the like) (e.g., see specification at page 14, lines 10-15).

Particularly, independent claim 1 recites a collaborative Web research method including

organizing a plurality of documents <u>in a N-dimensional space</u> according to a collection of subject

words; <u>based on said organizing</u>, retrieving, by a user, <u>said documents organized in said N-</u>

<u>dimensional space</u> according to said collection of subject words; and <u>detecting that a researcher</u>

<u>is retrieving documents which are considered related</u> **according to a distance function**

(emphasis added).

For at least the foregoing reasons, Applicant respectfully submits that Egger does <u>not</u>

disclose or suggest all of the features of the claimed invention, in as complete detail as recited in

independent claim 1. Therefore, Applicant submits that Eggers does <u>not</u> anticipate, or render

obvious, the claimed invention defined by independent claim 1.

Serial No. 09/893,599   18
Docket No. YOR920010318US1
(YOR.294)

On the other hand, independent claim 34 similarly recites, *inter alia*:

> organizing a plurality of documents a N-dimensional space
> according to a collection of subject words;
>
> based on said organizing, retrieving said documents
> organized in said N-dimensional space according to said collection
> of subject words; and
>
> detecting that a researcher is retrieving documents which
> are considered related **according to a distance function** (emphasis
> added).

Applicant respectfully submits that independent claim 34 is patentable over Egger for

somewhat similar reasons as those set forth above with respect to independent claim 1.

Thus, Applicant requests that the Examiner withdraw the rejection of claims 1 and 3-5,

and 34 and to permit these claims to pass to allowance.

ii.   Claims 18-22:

In the Response to Arguments, the Examiner further states that:

> *In response to applicant's arguments "Egger clearly does not*
> *disclose (sic) or suggest at least a notifier for notifying", page 17, the*
> *Examiner respectfully disagrees. Egger teaches a notifier for notifying*
> *(User interface provides an interactive notification to the users by*
> *displaying results (sic), thus user interface is a notifier, col 3, lines 49-54*
> *and col 50, lines 28-49), based on said closeness (col 50, lines 24-27), at*
> *least one other user of said user's bookmarks (col 47, lines 37-57,*
> *bookmark is an area of interest relevant document), said at least one other*
> *user having a similar interest to that of said user based on a distance*
> *function (col 47, lines 46-67 and col 16, lies 4-48).*

(see Office Action at page 10, numbered paragraph 26; emphasis added).

However, Applicant respectfully disagrees with the Examiner's position, and therefore,

traverses this rejection.

Applicant submits that (as the Examiner points out) Egger discloses nothing more than a

graphic user interface (GUI) that displays results (e.g., see Eggers at column 3, lines 49-53).

Serial No. 09/893,599 · 19
Docket No. YOR920010318US1
(YOR.294)

On the other hand, independent claim 18 recites, *inter alia*:

a tracker for tracking a user's bookmarks in accessing pages
in a network, and for tracking preferences of said user;

a unit for determining a closeness in research between
users; and

<u>a notifier for notifying, **based on said closeness, at least
one other user** of said user's bookmarks,</u> said at least one other
user having a similar interest to that of said user based on a
distance function (emphasis added).

Applicant submit that merely teaching a graphic user interface is not comparable to the

claimed "**notifier for notifying, based on said closeness, at least one other user** of said user's

bookmarks, said at least one other user having **a similar interest to that of said user based on a**

distance function", as claimed, for example, by independent claim 18.

Indeed, as mentioned in Applicant's Amendment under 37 C.F.R. § 1.111 filed on July 8,

2004 (which is incorporated herein by reference in its entirety), the Examiner <u>specifically</u>

<u>acknowledged</u> that Egger does <u>not</u> disclose or suggest <u>informing</u> (i.e., notifying) <u>a second user</u>

(see Office Action mailed April 8, 2004, at pages 5-6, numbered paragraph 12).

Thus, Applicant respectfully submits that the graphic user interface of Egger clearly does

<u>not</u> disclose or suggest "<u>a notifier for notifying, based on said closeness,</u> at least one <u>other user</u> of

said user's bookmarks, said at least one other user having <u>a similar interest to that of said user</u>

<u>based on a distance function</u>", as recited in independent claim 18.

For at least the foregoing reasons, Applicant respectfully submits that Egger does <u>not</u>

disclose or suggest all of the features of the claimed invention, in as complete detail as recited in

the claims. Therefore, claims 18-22 clearly are not anticipated by, or rendered obvious from,

Egger.

Serial No. 09/893,599   20
Docket No. YOR920010318US1
(YOR.294)

Accordingly, the Examiner respectfully is requested to withdraw the rejection of claims

1-5, 18-22, and 34, and to permit these claims to pass to immediate allowance.

B.   Claims 6-17, 23-33, 35, and 36 stand rejected under 35 U.S.C. § 103(a) as being

unpatentable over Egger in view of Anupam.

In the Response to Arguments, the Examiner states that:

> *In response to applicant's arguments "neither Egger nor Anupam
> discloses", page 20, the Examiner respectfully disagrees. Egger teaches
> determining coordinates for pages (algorithm is used to determine
> coordinates, col 6, lines 15-25) which are retrieved by a first user and
> mapping the coordinates into a space (col 6, lines 6-50); and*
>
> *Based on said coordinates (col 36, lines 18-40) of said pages (col
> 48, lines 19-45), closeness of a research (col 7, lines 54-67, col 48, lines
> 63-67 and col 5, lines 38-48).*
>
> *Anupam discloses informing a second user by first user (surrogate,
> 153, 173, fig 1, col 1, lines 66-67 and col 2, lines 1-8).*
>
> *Therefore it would have been obvious to one of ordinary skill in the
> art at the time invention was made to combine the teaching of (sic) Egger
> with Anupam because Anupam's use of creating surrogate for the user
> and inter surrogate communication would provide Egger's system with a
> (sic) user friendly computerized, web enabled, and an intelligent research
> tool that emulates human methods of research.*

(see Office Action at pages 10-11, numbered paragraph 27; emphasis added).

Applicant respectfully <u>disagrees</u> with the Examiner's position, and therefore, traverses

this rejection.

Applicant respectfully submits that it would <u>not</u> have been obvious to modify Egger

based on Anupam <u>to arrive at the claimed invention,</u> and even if combined, the resulting

combination would <u>not</u> <u>arrive at the claimed invention.</u>

Serial No. 09/893,599   21
Docket No. YOR920010318US1
(YOR.294)

For example, independent claim 6 recites, *inter alia*:

> determining coordinates for pages which are retrieved by a
> first user and mapping the coordinates into a space; and

> based on said coordinates of said pages, informing a second
> user of a closeness of a research by said first user.

The claimed invention provides a Web based collaborative research method which is capable of correlating the usage habits of each human researcher and is capable of notifying a researcher of a given topic that other researchers are currently working, or have worked on, in related topics. This facility can be used by researchers to find potential collaborators for a research task, and can be used in knowledge management applications at research institutions (e.g., see specification at page 11, lines 18-23).

Moreover, with the claimed invention, researchers can engage in efficient collaborative research. Further, the portal of the invention can correlate the usage habits of each human researcher and can automatically (or otherwise) notify a researcher of a given topic that other researchers are currently working in related topics (e.g., see specification at page 12, lines 1-5).

First, as mentioned above, Applicant submit that merely teaching a graphic user interface, as taught by Eggers, is not comparable to the informing a second user of a closeness of a research by the first user based on the coordinates of the pages, as claimed, for example, by independent claim 6.

Second, in stark contrast to the claimed invention, Anupam merely discloses a collaborative browsing session (e.g., see Anupam at Abstract). That is, Anupam merely permits the users to follow the browsing of other users.

Serial No. 09/893,599   22
Docket No. YOR920010318US1
(YOR.294)

Particularly, Anupam discloses that, when one of the surrogates <u>detects a change by a</u>

<u>collaborator of a uniform resource locator (URL), the new URL is communicated through</u>

<u>controllers to the surrogates of all other collaborators in the session.</u>

Thus, the collaborators are able <u>to move from one URL to another to browse information</u>

<u>in a synchronous manner</u> (e.g., see Anupam at Abstract; see also column 2, lines 36-39; and

column 4, lines 29-32).

Applicant respectfully submits that merely informing the collaborators <u>of a change from</u>

<u>one URL to another</u> to permit the collaborators <u>to browse information in a synchronous manner</u>

<u>clearly is different</u> than the claimed invention and would <u>not</u> have lead the ordinarily skilled

artisan to modify Egger to arrived <u>at the claimed invention.</u>

Indeed, neither Egger nor Anupam discloses, suggests, or for that matter even mentions,

"<u>based on said coordinates</u> of said pages, <u>informing a second user of a closeness of a research by</u>

<u>said first user</u>", as recited in independent claim 6 (emphasis added).

Moreover, even assuming *arguendo* that it would have been obvious to combine Egger

and Anupam, Applicant submits that the resulting combination clearly would <u>not</u> arrive at the

claimed invention recited, for example, in independent claim 6.

That is, as mentioned above, neither Egger nor Anupam discloses, suggests, or for that

matter even mentions, "<u>based on said coordinates</u> of said pages, <u>informing a second user of a</u>

<u>closeness of a research by said first user</u>", as recited in independent claim 6 (emphasis added).

Thus, for at least the foregoing reasons, Applicant respectfully submits that it would <u>not</u>

have been obvious to combine Egger and Anupam to arrive at the claimed invention, and even if

combined, the resulting combination clearly would <u>not</u> disclose or suggest the claimed invention.

Serial No. 09/893,599   23
Docket No. YOR920010318US1
(YOR.294)

Applicant submits that independent claims 17, 23, 35, and 36 also are patentable over the

alleged combination of Egger and Anupam for somewhat similar reasons as independent claim 6.

For example, independent claim 17 recites, *inter alia*:

> tracking a plurality of users' accessing of pages in a network;
> and
>
> based on a closeness of at least first and second users, notifying
> said first and second users of one another's accessing of said
> pages.

On the other hand, independent claim 23 recites, *inter alia*:

> a unit for determining coordinates for pages which are
> retrieved by a first user and mapping the coordinates into a space;
> and
>
> a notifier for informing, based on said coordinates of said
> pages, a second user of a closeness of a research by said first user.

Further, independent claim 35 recites, *inter alia*:

> tracking a plurality of users' accessing of pages in a network;
> and
>
> based on a closeness of at least first and second users, notifying
> said first and second users of one another's accessing of said
> pages.

Also, independent claim 36 recites, *inter alia*:

> determining coordinates for pages which are retrieved by a first
> user and mapping the coordinates into a space; and
>
> based on said coordinates of said pages, informing a second
> user of a closeness of a research by said first user.

Serial No. 09/893,599   24
Docket No. YOR920010318US1
(YOR.294)

Thus, for at least the foregoing reasons, Applicant respectfully submits that it would <u>not</u>

have been obvious to combine Egger and Anupam to arrive at the claimed invention, and even if

combined, the resulting combination clearly would <u>not</u> disclose or suggest the claimed invention,

as defined by claims 6-17, 23-33, 35, and 36.

Accordingly, the Examiner respectfully is requested to withdraw this rejection and permit

these claims to pass to immediate allowance.

III.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1 and 3-36, all the claims

presently pending in the application, are patentably distinct over the prior art of record and are in

condition for allowance. The Examiner is respectfully requested to pass the above application to

issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the

Examiner is requested to contact the undersigned at the local telephone number listed below to

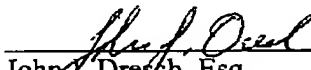discuss any other changes deemed necessary in a telephonic or personal interview.

Serial No. 09/893,599   25
Docket No. YOR920010318US1
(YOR.294)

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any

overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully submitted,

Date: _December 6, 2004_   _[signature]_
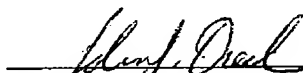   John J. Dresch, Esq.
                                   Registration No. 46,672

                                   Sean M. McGinn, Esq.
                                   Registration No. 34,386

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254

CERTIFICATE OF TRANSMISSION

I certify that I transmitted via facsimile to (703) 872-9306 the enclosed Amendment

under 37 C.F.R. § 1.116 to Examiner Mohammad A. Siddiqi on December 6, 2004.

[signature]
John J. Dresch, Esq.
Registration No. 46,672
Sean M. McGinn, Esq.
Registration No. 34,386